

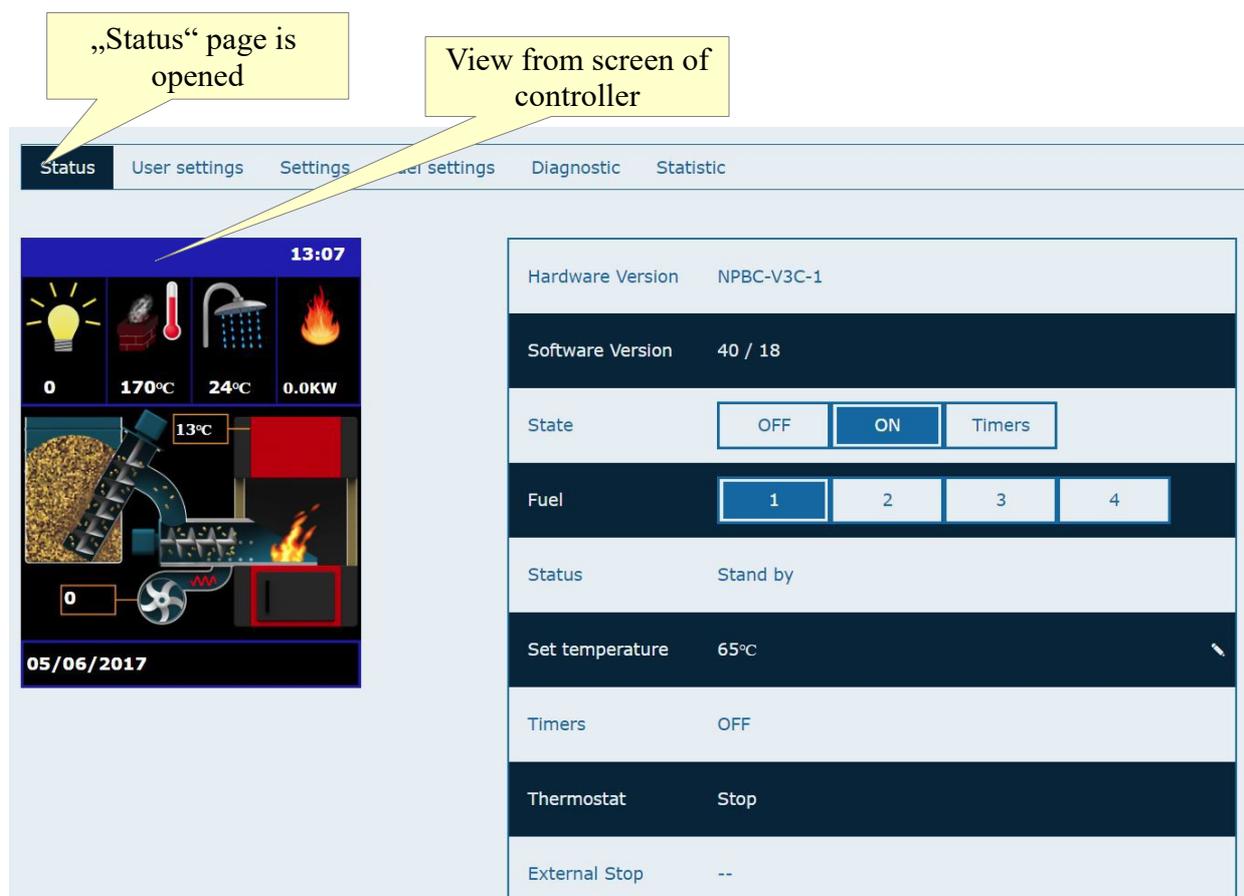
## Naturela Smart Home system

User interface for work with controllers NPBC-V3C-xx,  
used in pellet burners, fireplaces, stoves, and boilers

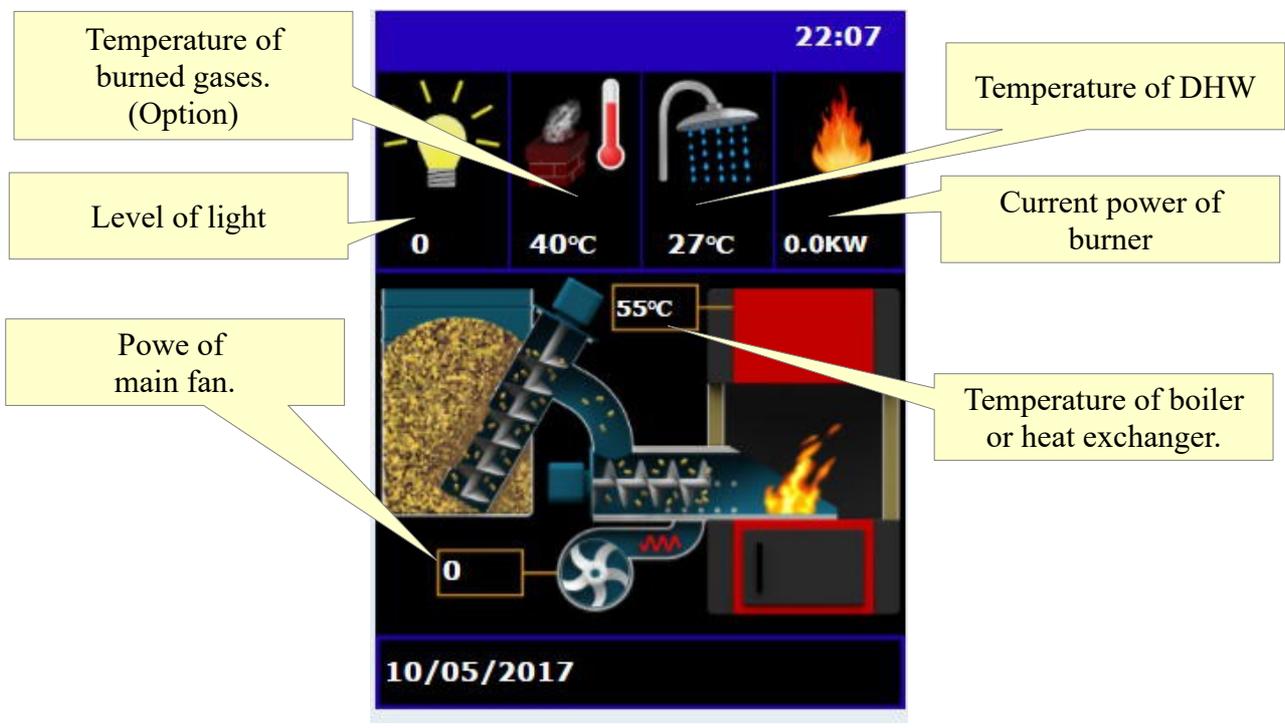
User Manual

In order to learn how to work with the Naturela Smart Home system, look at the file:  
**Nat\_Smarthome\_EN.pdf.**

The user interface consists of a view from the controller's screen, which shows the current time, amount of light received by the photo-sensor, temperature of burned gases, temperature of DHW, current energy of the fire, temperature of the boiler, and speed of the main fan. Information about the controller is divided into 6 pages: "Status", "User Settings", "Settings", "Fuel Settings", "Diagnostic", and "Statistic." You can use the cursor to navigate between the different pages.



In the „**Status**” page, there is a image, which resembles the one that is on the controller’s screen, and it includes information regarding some of the more important parameters of the burner.



The rest of the information is generated into a table with the following content: software and hardware version, work state of the controller, chosen fuel, work phase, recorded consumption of pellets, status of pumps and igniter, status of the timers, consumption of pellets, presence of registered errors from the self-diagnosis system, and others. Using the buttons on this page, the burner can be turned on and off, turned on using the timers setting, profile of the type of fuel that is currently being used can be modified, the set temperature can be raised or lowered, and the total feed of pellets can be reset.

The screenshot shows a control interface with the following elements and callouts:

- Software Version:** 40 / 18
- State:** OFF, ON, Timers (Callout: Buttons for changing power state)
- Fuel:** 1, 2, 3, 4 (Callout: Buttons for choosing type of fuel)
- Status:** Stand by
- Set temperature:** 65°C (Callout: Button for editing set temperature)
- Timers:** OFF
- Thermostat:** Stop
- External Stop:** --
- Exhaust fan:** 0
- Cleaner:** OFF
- Igniter:** OFF
- CH pump:** OFF
- DHW pump:** OFF
- Total feed:** 0kg - 05/06/2017 (Callout: Date from when pellet consumption began)
- Reset:** (Callout: Button for resetting pellet consumption)

In the „User Settings“ page, settings of the timers and the circulation pumps can be viewed and edited.

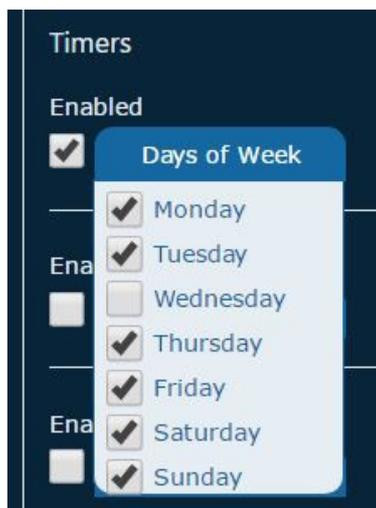
### Timers field

If you know that you would require heat only at specific hours of the week, then you can use one of the three controller timers, by programming them when to turn the burner on and off.

*In order to use the timers, the controller shouldn't only have enabled and have tuned timer settings, but it also must be switched to "Timers" mode!*



In order for the timers to work, apart from setting a beginning and end time, they need to be activated by clicking on the checkbox where it says "Enabled". One more thing that needs to be selected, is which days of the week the timers would be used. This can be done by clicking on the button "Days of the week" and marking the checkboxes for the days that you want the timer to be working.



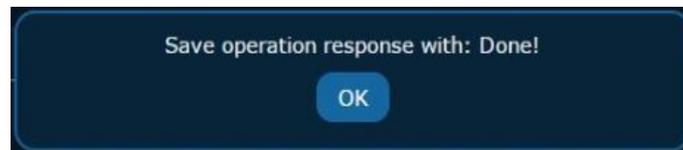
*When programming the timers, you need to know that the "Begin" hour must be before the "End" hour. The reverse combination is impossible, which means that you would probably need to set the "End" hour first.*

## „Pump Settings“ field

Here, the settings for the central heating pump and the domestic hot water pump can be attuned, turned on and off, and the pump mode (type of priority) of the burner can be set.



In order for the new settings to load into the controller, after changing them, you will need to click on the button “Send.” After which wait for a response from the controller with the results of the operation. The response will be in a window just like the one below. After it appears, you need to click on “OK.”



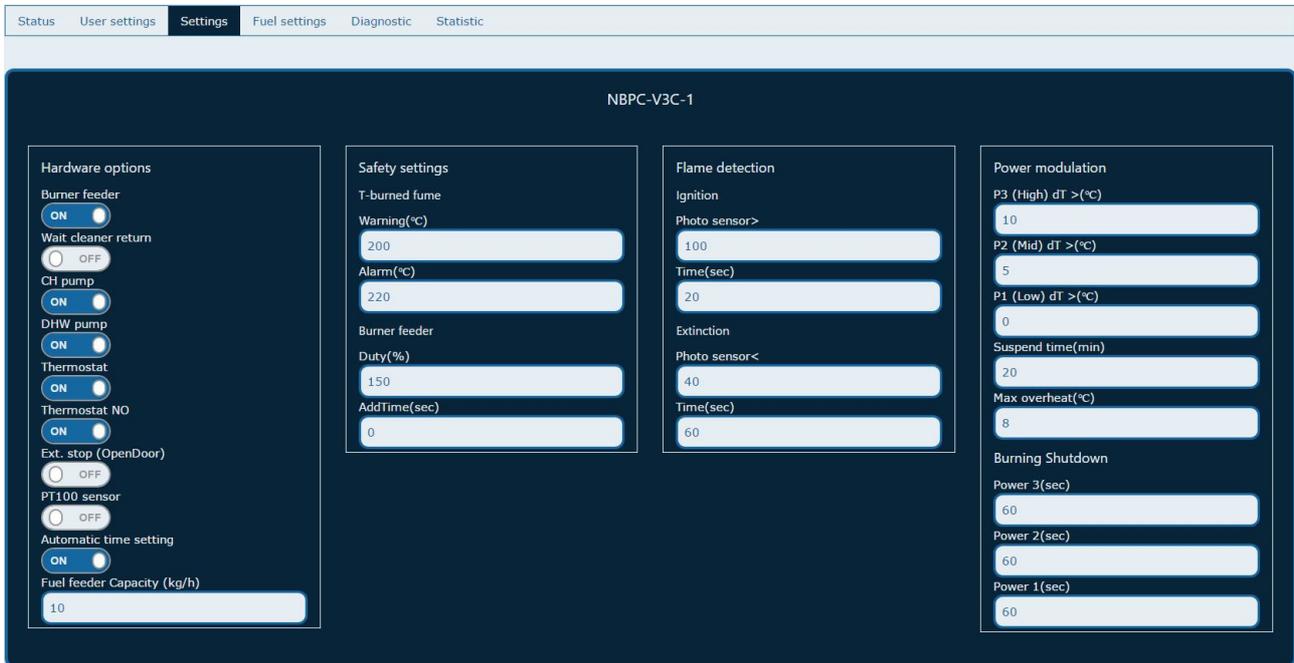
With the help of the “Save” button, which is located at the bottom of the page, the current configuration of the controller will be saved into the system’s server. This way, if you make a mistake for one of the parameters, you can restore the previous configuration by first clicking on the “Load” button, which will take the already saved settings from the server. After that, by clicking “Send” these settings will be transferred to the controller.

If you wish to store the parameters of the controller settings on a file in your computer, you can use the “Export” button to save them and the “Import” button to load existing files for future use. This option will be very useful in case you wish to use already tested and working parameters for other similar devices.

*While changing the settings, if one of the parameters exceeds its allowed value, the field around it will be marked in red.*

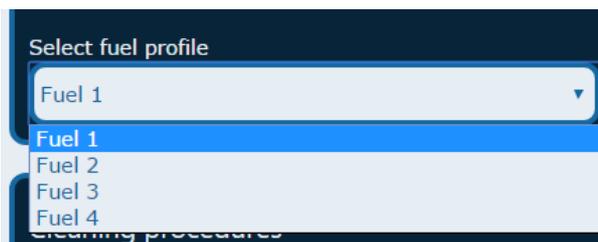
*After hitting “Send,” if one of the parameters has a value which the controller cannot accept, the whole field will be marked in red.*

The "Settings" page allows modification of all parameters controlling the burner, which would not be affected when the type of fuel is changed. These settings are linked with the general hardware options, the "Safety settings" of the temperature from the burned gases, the flame detection settings, the power modulation settings (based on the reached temperature of the boiler, compared to the set value), and others.



### "Fuel Settings" page

This control allows initial settings for up to four profiles for different fuels. Just by switching the number of the fuel profile, you can adapt the burner to the most appropriate parameters for the fuel that is being used. When clicking on this page, the first thing is to choose the fuel profile and number:



After that, you can change the parameters in the “Cleaning procedures” field:

Cleaning procedures

<b>Cleaning on start</b> Fan(sec) 180 Cleaner(sec) 0	<b>Cleaning on stop</b> Fan(sec) 180 Cleaner(sec) 0	<b>Cleaning on BB alarm</b> Fan(sec) 180 Cleaner(sec) 0
<b>Auto cleaning</b> Enabled <input type="radio"/> OFF Interval(min) 120	<b>Intermediate cleaning</b> Enabled <input type="radio"/> OFF Cycle(min) 10 Duration(sec) 30 Change fan speed <input checked="" type="checkbox"/> ON Main fan speed 75 Exhaust fan speed 20 Use cleaner motor <input type="radio"/> OFF	

"Ignition Settings", "Burning first dose," and "Burning startup"

<b>Ignition settings</b> Retries 3 Initial feed(sec) 10 Exhaust fan speed 0 Ignition heater only 30	<b>Ignition phase 1</b> Duration(sec) 120 Fan 34 <b>Ignition phase 2</b> Duration(sec) 130 Fan 29	<b>Burning first dose</b> Duration(sec) 0 Main fan speed 20 Exhaust fan speed 20	<b>Burning startup</b> Power level 1(sec) 60 Power level 2(sec) 60
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## Modification of power levels in the field “Burning Settings”

Burning settings

Power level P3	Power level P2	Power level P1	Power level PS
Feed(sec) 5	Feed(sec) 3	Feed(sec) 6	Feed(sec) 2
Cycle(sec) 30	Cycle(sec) 30	Cycle(sec) 30	Cycle(sec) 120
Main fan speed 100	Main fan speed 50	Main fan speed 25	Main fan speed 5
Exhaust fan speed 100	Exhaust fan speed 50	Exhaust fan speed 25	Exhaust fan speed 5

The page “**Diagnostic**” shows information about registered from the controller malfunctions and peculiar events. They are recorded with an exact time and date of their occurrence.

*The data is not refreshed automatically from the controller. For this reason, when opening this page, first you need to click on the “Update” button!*

Update

NBPC-V3C-1	
Date	Event
28/05/2017 09:52	Ignition Fail
26/05/2017 09:36	Ignition Fail
25/05/2017 14:12	Off WH Sensor
25/05/2017 14:12	Menu settings

In the “**Statistic**” page you can find graphs containing information about pellet consumption from previous days and pellet consumption for different hours from a specific day. In order to view the graphs, you will need to select a date or a make a selection of dates. This can be done using the menu below:

Select Days

- 16/05/2017
- 15/05/2017
- 12/05/2017
- 10/05/2017
- 08/05/2017

By pressing Ctrl, more than one day can be selected using the mouse.

The vertical axis shows the consumption of pellets at the particular hour of the day and the horizontal axis of the coordinate system shows the hours of the selected day.

Hovering with the cursor over a graph bar will show its value

